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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,544

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Noriyuki Suzuki

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EXAMINER

BONK, TERESA

ART UNIT

PAPER NUMBER

3725

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,544	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> Teresa M. Bonk	<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/11/06; 9/18/06; 10/19/06; 6/6/07.

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## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 19 and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant's election with traverse of Invention I in the reply filed on October 20, 2009 is acknowledged. The traversal is on the ground(s) that there is not undue burden on the Examiner. This is not found persuasive because Invention II (claims 19 and 20) has the different technical feature of software that executes four sets of instructions that is not in the claims of Invention I and would also require a separate search.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

The abstract of the disclosure is objected to because it is over the 150 word limit. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 11-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Trausi et al. (hereafter “Trausi”) (US Patent 5,507,164).**

With regards to **claim 11**, Trausi discloses a press-forming device for press-forming at least one portion of a material (part or billet) according to at least one predetermined condition, comprising: at least one arrangement of:

a material characteristic input arrangement configured to provide at least first one characteristic from material characteristics comprising a thickness (diameter) of the at least one portion of the material, an elongation (height) of the at least one portion of the material, a stress-strain relation equation (strain rate) [equation: Column 4, line 48] for the at least one portion of the material and temperature [Column 4, lines 61-65];

a state variable detector (sensor) configured to measure at least one of state variables comprising a punch reaction (rate of movement), a metal mold temperature (temperature of heating elements/furnace) during the formation of the at least one portion of the material [Step S7 Figure 4, Column 1, lines 49-52, Column 2, lines 43-45, and Column 5, lines 32-33];

a processing condition computer arrangement (computer 30) configured to determine at least one particular processing condition from at least one of a forming speed of the at least one

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portion of the material as a function of at least two of the at least one first characteristic [Column 5, lines 38-59]; and

a processing condition controller configured to control the at least one processing condition from processing conditions comprising at least one of a punch (from model: ram 20.3) movement speed based on the at least one processing condition [Column 5, lines 60+].

With regards to **claim 12**, Trausi discloses wherein the material characteristic input arrangement comprises at least one a manual input device (keyboard 18).

With regards to **claim 13**, Trausi discloses press-forming method for press-forming at least one section of a material according to at least one predetermined forming condition, comprising:

providing at least first one characteristic from material characteristics comprising a thickness (diameter) of the at least one portion of the material, an elongation (height) of the at least one portion of the material, a stress-strain relation equation (strain rate) [equation: Column 4, line 48] for the at least one portion of the material, and temperature [Column 4, lines 61-65];

measuring at least one of state variables comprising a punch reaction (rate of movement), a metal mold temperature (temperature of heating elements/furnace) during the formation of the at least one portion of the material [Step S7 Figure 4, Column 1, lines 49-52, Column 2, lines 43-45, and Column 5, lines 32-33];

determining at least one particular processing condition from at least one of a forming speed of the at least one portion of the material as a function of at least two of the at least one first characteristic [Column 5, lines 38-59]; and

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controlling the at least one processing condition from processing conditions comprising at least one of a punch (from model: ram 20.3) movement speed based on the at least one processing condition [Column 5, lines 60+].

With regards to **claim 14**, Trausi discloses wherein the at least first one characteristic is provided using at least one of a manual input procedure (operator enters parameters on keyboard 180.

With regards to **claim 15**, Trausi discloses press-forming method for press-forming at least one section of a material according to at least one predetermined forming condition, comprising:

measuring at least one variable from state variables which comprise a punch reaction (rate of movement), a metal mold temperature (temperature of heating elements/furnace), and a workpiece deformation amount (billet dimensions and new billet location) for every formation of the at least one section of the material [Step S7 & S9 Figure 4, Column 1, lines 49-52, Column 2, lines 43-45, and Column 5, lines 32-33];

comparing at least one variable (workpiece deformation amount) with at least one previously-measured or previously-obtained one of the state variable to generate a comparison result [Step S9, Figure 4, Column 5, lines 38-59];

determining at least one processing condition from at least one type a forming speed using the comparison result [Column 5, lines 38+ and Column 6, lines 1-6]; and

controlling at least one processing condition of processing conditions which comprise a punch (ram) movement speed based on the at least one processing condition [Column 5, lines 60+].

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With regards to **claim 16**, Trausi discloses providing at least one characteristic from material characteristics comprising a thickness (diameter) of the at least one portion of the material, an elongation (height) of the at least one portion of the material, a stress-strain relation equation (strain rate) [equation: Column 4, line 48] for the at least one portion of the material, and temperature [Column 4, lines 61-65]; wherein the at least one processing condition is determined from the at least one characteristic and the at least one variable for every formation of the at least one portion measured for the at least one variable [Column 5, lines 38+ and Column 6, lines 1-6].

With regards to **claims 17 and 18**, Trausi discloses wherein the comparison result is obtained by comparing a difference between a past state variable and the at least one variable, a moving average value and a predetermined value within at least one of a predetermined time period or a predetermined number of repetitions [Column 5, lines 38-60].

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571)272-1901. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teresa M. Bonk/  
Examiner, Art Unit 3725